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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER JOHNSON, CARLTON				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/693,224

Applicant(s)

SHAO, TONG

Examiner

CARLTON V. JOHNSON

Art Unit

2436

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 31-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 31-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is responding to application amendment filed 9-19-2008.
2. Claims **31 - 50** are pending. Claim **31** has been amended. Claims **1 - 30** have been cancelled. Claim **31, 47** are independent. This application was filed 10-24-2003.

Response to Arguments

3. Applicant's arguments filed 9-19-2008 have been fully considered but they were not persuasive.

3.1 Applicant argues that the referenced prior art does not disclose, physically separated systems. (see Remarks Pages 8,10)

The claimed invention as a whole discloses: (1) two physically separated networks (an internal and an external network); (2) a processor able to operate in two operational states; (3) the capability to switch between the two operational states; (4) a non-maskable interrupt operation used to switch operational state.

The Watts prior art discloses two physically separated networks (a host network and an access network) (see Watts paragraph [0030], lines 1-11: Ethernet connection (network adapter); second is a network connection for data transfer with Access network; third is a network connection for data transfer with host network; (Host and Access networks); paragraph [0043], lines 1-18: physically separated networks (home and access networks)). And, the Heider prior art discloses a central processor unit that

is operational in two operational states. (see Heider col. 15, lines 64-67: save state information (storage) for resumption, capability to switch between a first status state and a second status state) The Heider prior art discloses the completion of a non-maskable interrupt instruction to switch operational state. (see Heider col. 14, lines 15-17: non-maskable interrupt (i.e. NMI) utilized to process command(s); col. 17, line 63 - col. 18, line 4: command capability (control commands))

3.2 Applicant argues that the referenced prior art does not disclose, obviousness. (see Remarks Page 10)

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case,

Achieved advantage is a valid motivation for the combination of referenced prior art. The combination of each referenced prior art combination states a motivation for the combination, which translates to an achieved advantage for the combination.

3.3 Applicant argues that the referenced prior art does not disclose, hindsight. (see Remarks Page 11)

In response to applicant's argument that the examiner's conclusion that obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

3.4 Applicant argues that the referenced prior art does not disclose, non-cited references. (see Remarks Page 12)

There were no cited but non-applied references. The set of references disclosed in the PTO-892 References Form and the Office Action are Watts (2002/0129276), Heider (5,276,863), and Largman (20002/0188887).

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 31 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one

skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

There is no disclosure in Claim **31** for the claim limitation: "wherein said first storage unit and said second storage unit are separated and said information of said first storage unit can not be accessed in said second operation status, said information of said second storage unit can not be accessed in said first operation status".

The specification in paragraph {0005} discloses:

"... once the external network is started up, the hard disk or network connected to the internal network is physically separated, i.e. the internal system is absolutely not accessible or at least is not able to be effectively read from or written on. Thus, a user is able to use either the internal system or the external system with one computer, with the physical separation of the internal and the external networks and consequent security of the internal data."

The specification stresses two separate networks (an internal and an external network). As stated in the specification, the external network nodes cannot access or write to storage in the internal network. There is no additional disclosure for storage devices such that a first storage device is not accessible in an "operation status" (meaning is unclear?). The meaning is unclear what affect the operation status has on write access for a storage device.

There is no disclosure in Claim **31** for the claim limitation: "wherein said first network can not be connected in said second operation status, and said second network can not be connected in said first operation status".

Appropriate correction required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims **31 - 50** are rejected under 35 U.S.C. 103 (a) as being unpatentable over **Watts** (US PGPUb No. **20020129276**) in view of **Heider** (US Patent No. **5,276,863**) and further in view of **Largman et al.** (US PGPUb No. **20020188887**).

With Regards to Claim 31, Watts discloses a computing system for securely accessing two separate networks, comprising:

- a) a central processing unit which is able to operate in a first and a second operation status; (see Watts paragraph [0046], lines 1-3: use of a general purpose processor and software which can operation in two operation statuses)
- b) said first operation status wherein said information is utilized by said central processing unit to execute computing operation in said first operation status only; (see Heider col. 15, lines 64-67: save state information (storage) for resumption, capability to switch between a first status state and a second status state)
- c) said second operation status wherein said information is utilized by said central processing unit to execute computing operation in said second operation status

only (see Heider col. 15, lines 64-67: save state information for resumption, capability to switch between a first status state and a second status state),
wherein said first storage unit and said second storage unit are separated and said information of said first storage unit can not be accessed in said second operation status, said information of said second storage unit can not be accessed in said first operation status; (see Watts paragraph [0043], lines 1-18: physically separated networks (home and access networks))

- d) a first network adaptor which is communicatively connected with said first network in said first operation status only; (see Watts paragraph [0030], lines 1-11: Ethernet connection (network adapter); second is a network connection for data transfer with Access network; third is a network connection for data transfer with host network; (Host and Access networks); paragraph [0043], lines 1-18: physically separated networks (home and access networks))
- e) a second network adaptor which is communicatively connected with said second network in said second operation status only, wherein said first and second networks are physically separated, wherein said first network can not be connected in said second operation status, and said second network can not be connected in said first operation status; (see Watts paragraph [0030], lines 1-11: Ethernet connection (network adapter); second is a network connection for data transfer with Access network; third is a network connection for data transfer with host network; (Host and Access networks) (internal and external network; two

networks); paragraph [0043], lines 1-18: physically separated networks (home and access networks)) wherein said first network can not be connected in said second operation status, and said second network can not be connected in said first operation status; (see Watts paragraph [0034], lines 8-15: firewall memory can not be access while access network is connected; no disclosure for first network can not be connected in second operation status; second network can not be connected in first operation status)

- f) a switch device operatively communicated with said central processing unit to switch said operation status between said first and second operation status (see Watts paragraph [0013], lines 4-13: switch between networks), wherein in said first operation status, said central processing unit is switched to access operation status information from said storage unit, and said computing system is connected with said first network, wherein in said second operation status, said central processing unit is switched to access operation status information from said storage unit, and said computing system is connected with said second network. (see Watts paragraph [0028], lines 1-6: switch box: has a connection for the Host network to pass data; a connection for the Access network to pass data)

Watts does not specifically disclose a storage unit storing information of said operation status respectively wherein said information of said first and said second operation status is utilized by said central processing unit to execute computing

operation in said operation status respectively. And, Watts does not specifically disclose that during the switching of operation status said central processing unit doesn't execute other computing operations. However, Heider discloses wherein a storage unit storing information of said operation status respectively wherein said information of said first and said second operation status is utilized by said central processing unit to execute computing operation in said operation status respectively (see Heider col. 15, lines 64-67: save state information for resumption, capability to switch between a first status state and a second status state) and during the switching of operation status said central processing unit doesn't execute other computing operation (see Heider col. 14, lines 15-17: non-maskable interrupt (i.e. NMI) to perform request (i.e. command))

It would have been obvious to one of ordinary skill in the art to modify Watts whereby during the switching of operation status said central processing unit doesn't execute other computing operation as taught by Heider. One of ordinary skill in the art would have been motivated to employ the teachings of Heider in order to eliminate any need to separately upgrade a number of computer systems when revisions are made in the computer systems themselves or in the procedures used for management, maintenance, and debugging. (see Heider col. 4, lines 7-13: " ... *It may be beneficial to provide a single point in a network at which multiple computer systems can be managed. Such an approach may eliminate any need to separately upgrade a number of computer systems when revisions are made in the computer systems themselves or in the procedures used for management, maintenance, and*

debugging. ... ")

Watts-Heider does not specifically disclose a first storage unit storing information and a second storage unit storing information. However, Largman disclose a first storage unit storing information and a second storage unit storing information. (see Largman paragraph [0021], lines 1-12: switch between entire sets of storage devices, network connections)

It would have been obvious to one of ordinary skill in the art to modify Watts-Heider for a first and a second storage device as taught by Largman. One of ordinary skill in the art would have been motivated to employ the teachings of Largman in order to more easily create and update templates used in network repairs, perform software installations and "updates" of client computers. (see Largman paragraph [0006], lines 12-17: "*... Additionally, this gave us the ability to construct computers that could be used by network administrators to rapidly switch between large numbers of data storage devices, and therefore, more easily create and update templates used in network repairs, perform software installations and "updates" of client computers. ...*")

With Regards to Claim 32, Watts discloses the computing system, as recited in claim 31, wherein said switch device comprises a status switch command input unit adapted to trigger an input signal for switching between said first operation status and said second operation status (see Watts paragraph [0031], lines 1-4: data packets pass back and forth from host network connection to node network connection or back and forth

from access network to node network connection); a secured switch control unit communicating with said command input unit and said central processing unit in such a manner that when said input signal is triggered, said secured switch control unit is adapted to generate a switch control signal which is then transmitted to said central processing unit for initialing a switching task between said first operation status and said second operation status (see Watts paragraph [0030], lines 9-11: fourth network connection is a connection for control of the switch box through the host network (control signal for controlling switch box)); and a connection switch unit communicating with said secured switch control unit for switching connection between said storage unit and said first and second network when said central processing unit is ready. (see Watts paragraph [0028], lines 1-6: switch box: computer uses connection to control which network (first and second) is connected to the node)

Watts-Heider does not specifically disclose a first and a second storage unit. However, Largman disclose a first and a second storage unit. (see Largman paragraph [0021], lines 1-12: switch between entire set of storage devices, network connections)

It would have been obvious to one of ordinary skill in the art to modify Watts-Heider for a first and a second storage device as taught by Largman. One of ordinary skill in the art would have been motivated to employ the teachings of Largman in order to more easily create and update templates used in network repairs, perform software installations and "updates" of client computers. (see Largman paragraph [0006], lines 12-17)

With Regards to Claim 33, Watts discloses the computing system, as recited in claim 32, switch control unit. (see Watts paragraph [0028], lines 1-6: switch box (control unit); computer uses connection to control which network is connected to the node) Watts does not specifically disclose secured switch prevents said central processing unit from performing other program and reacting to other interrupts. However, Heider discloses wherein during said switching process, secured switch prevents said central processing unit from performing other program and reacting to other interrupts. (see Heider col. 14, lines 15-17: non-maskable interrupt (i.e. NMI) utilized to process command(s))

It would have been obvious to one of ordinary skill in the art to modify Watts for the secured switch to prevent said central processing unit from performing other program and reacting to other interrupts as taught by Heider. One of ordinary skill in the art would have been motivated to employ the teachings of Heider in order to eliminate any need to separately upgrade a number of computer systems when revisions are made in the computer systems themselves or in the procedures used for management, maintenance, and debugging. (see Heider col. 4, lines 7-13)

With Regards to Claim 34, Watts discloses the computing system, as recited in claim 33. (see Watts paragraph [0028], lines 1-6: switch box (control unit); computer uses connection to control which network is connected to the node) Watts does not specifically disclose a non-maskable interrupt (NMI). However, Heider discloses wherein said secured switch control unit sends a non-maskable interrupt (NMI) to said central processing unit to execute operation status switching when said input signal is

triggered. (see Heider col. 14, lines 15-17: non-maskable interrupt (i.e. NMI) utilized to process command(s))

It would have been obvious to one of ordinary skill in the art to modify Watts for a non-maskable interrupt (NMI) as taught by Heider. One of ordinary skill in the art would have been motivated to employ the teachings of Heider in order to eliminate any need to separately upgrade a number of computer systems when revisions are made in the computer systems themselves or in the procedures used for management, maintenance, and debugging. (see Heider col. 4, lines 7-13)

With Regards to Claims 35, 36, Watts discloses the computing system, as recited in claim 32, wherein said secured switch control unit. (see Watts paragraph [0028], lines 1-6: switch box (control unit); computer uses connection to control which network is connected to the node) Watts does not specifically disclose an identification verification unit which is adapted to verify identity of a user giving said external switching command. However, Heider discloses further comprising an identification verification unit which is adapted to verify an identify of a user giving said external switching command so as to ensure said switching between said first operation status and said second operation status is carried out by an authorized and legitimate user. However, Heider discloses wherein an identification verification unit which is adapted to verify an identify of a user giving said external switching command so as to ensure said switching between said first operation status and said second operation status is carried out by an authorized and legitimate user. (see Heider col. 14, lines 26-34: authorization

and authentication performed (i.e. user identity, ID verification), switch operation only allowed if authorization succeeds)

It would have been obvious to one of ordinary skill in the art to modify Watts for an identification verification unit which is adapted to verify an identity of a user giving said external switching command as taught by Heider. One of ordinary skill in the art would have been motivated to employ the teachings of Heider in order to eliminate any need to separately upgrade a number of computer systems when revisions are made in the computer systems themselves or in the procedures used for management, maintenance, and debugging. (see Heider col. 4, lines 7-13)

With Regards to Claims 37, 38, Watts discloses the computing system, as recited in claim 35. (see Watts paragraph [0028], lines 1-6: switch box (control unit); computer uses connection to control which network is connected to the node) Watts does not specifically disclose a first random access memory module, a first display memory module, and a first hard disk. However, Largman discloses wherein said first storage unit of said first operation status comprises a first random access memory module, a first display memory module, and a first hard disk, wherein said second storage unit of said second operation status comprises a second random access memory module, a second display memory module, and a second hard disk, wherein said connection of the central processing unit to said first random access memory module, first display memory module, and first hard disk, or to said second random access memory module, second display memory module, and second hard disk is switched by said connection

switch unit. (see Largman paragraph [0021], lines 1-12: switch between entire sets of storage devices (first and second storage systems), network connections)

It would have been obvious to one of ordinary skill in the art to modify Watts-Heider for a first random access memory module, a first display memory module, and a first hard disk as taught by Largman. One of ordinary skill in the art would have been motivated to employ the teachings of Largman in order to more easily create and update templates used in network repairs, perform software installations and "updates" of client computers. (see Largman paragraph [0006], lines 12-17)

With Regards to Claims 39, 40, 41, 42, Watts discloses the computing system, as recited in claim 32. (see Watts paragraph [0028], lines 1-6: switch box (control unit); computer uses connection to control which network is connected to the node) However, Heider discloses wherein said secured switch control unit comprises a write-protect memory communicating with said central processing unit, wherein said write-protect memory stores the control commands for said central processing unit to perform operation status switching; and a monitoring unit adapted to receive said input signal for switching operation status from said command input unit, and interrupt said central processing unit to perform said control commands for operation status switching. (see Heider col. 14, lines 15-17: non-maskable interrupt (i.e. NMI) utilized to process command(s); col. 17, line 63 - col. 18, line 4: command capability (control commands))

It would have been obvious to one of ordinary skill in the art to modify Watts for control commands and to receive an input signal for switching status (a non-maskable

interrupt (NMI)) as taught by Heider. One of ordinary skill in the art would have been motivated to employ the teachings of Heider in order to eliminate any need to separately upgrade a number of computer systems when revisions are made in the computer systems themselves or in the procedures used for management, maintenance, and debugging. (see Heider col. 4, lines 7-13)

With Regards to Claims 43, 44, 45, 46, Watts discloses the computing system, as recited in claim 39. (see Watts paragraph [0028], lines 1-6: switch box (control unit); computer uses connection to control which network is connected to the node) However, Heider discloses wherein further comprises a set trigger electrically connected to said monitoring unit for sending out a NMI signal to said central processing unit when switching operation status is allowed, and a reset trigger electrically connected to said monitoring unit and said set trigger in such a manner that when switching of said two operation statuses is finished, said monitoring unit is adapted to send a signal to said reset trigger, which then reset said set trigger and mask said switching function of said connection switch unit for preventing illegitimate switching between said two statuses. (see Heider col. 14, lines 15-17: non-maskable interrupt (i.e. NMI) utilized to process command(s); col. 14, lines 35-38: authorization fails, reset saved state (i.e. ON state, console state); col. 14, lines 15-17: non-maskable interrupt (i.e. NMI) utilized during reset operation)

It would have been obvious to one of ordinary skill in the art to modify Watts for masking said switching function of said connection switch unit for preventing illegitimate

switching between said two statuses (a non-maskable interrupt (NMI)) as taught by Heider. One of ordinary skill in the art would have been motivated to employ the teachings of Heider in order to eliminate any need to separately upgrade a number of computer systems when revisions are made in the computer systems themselves or in the procedures used for management, maintenance, and debugging. (see Heider col. 4, lines 7-13)

With Regards to Claim 47, Watts discloses a method of securely switching at least two operation statuses to access at least two physically separated networks alternatively, wherein said method comprises the steps of:

- (f) connecting to a second network; (see Watts paragraph [0028], lines 1-6: switch box (control unit); computer uses connection to control which network is connected to the node)
- (k) connecting to said first network; (see Watts paragraph [0028], lines 1-6: switch box (control unit); computer uses connection to control which network is connected to the node)
- (m) switching back to said first operation status. (see Watts paragraph [0028], lines 1-6: switch box (control unit); computer uses connection to control which network is connected to the node)

Watts does not specifically disclose: (a) receiving a request; (b) analyzing said request; (c) sending a non-maskable interrupt; save information of said first operation status; (g) reading information of said second operation; and (h)

processing requested function.

However, Heider discloses:

- (a) receiving a request for switching said computing system from a first operation status to a second operation status by a command input unit; (see Heider col. 5, lines 53-63; col. 13, lines 48-49: perform switch, from one state to another state; col. 14, lines 15-17: non-maskable interrupt (i.e. NMI) to perform request (i.e. command); col. 17, line 63 - col. 18, line 4: command capability)
- (b) analyzing said request for switching to determine whether to execute; (see Heider col. 14, lines 26-34: authorization and authentication performed (i.e. user identity, ID verification), switch operation only allowed if authorization succeeds)
- (c) sending a non-maskable interrupt to said central processing unit to process operation status switching if said request switching is accepted; (see Heider col. 14, lines 15-17: non-maskable interrupt (i.e. NMI) utilized to process command(s))
- (d) saving information of said first operation status in a first storage unit; (see Heider col. 15, lines 64-67: save state information for resumption)
- (g) reading information of said second operation status; (see Heider col. 15, lines 64-67: access state information for resumption))
- (h) processing requested function in said second operation status; (see Heider col. 5, lines 53-63; col. 13, lines 48-49: perform switch, from one state to another state; col. 17, line 63 - col. 18, line 4: command capability)
- (i) saving information of said second operation status; (see Heider col. 15, lines 64-

67: save state information for resumption))

(l) reading information of said first operation status; (see Heider col. 15, lines 64-67:
access state information for resumption))

It would have been obvious to one of ordinary skill in the art to modify Watts for:

(a) receiving a request; (b) analyzing said request; (c) sending a non-maskable interrupt; save information of said first operation status; (g) reading information of said second operation; and (h) processing requested function as taught by Heider.

One of ordinary skill in the art would have been motivated to employ the teachings of Heider in order to eliminate any need to separately upgrade a number of computer systems when revisions are made in the computer systems themselves or in the procedures used for management, maintenance, and debugging. (see Heider col. 4, lines 7-13)

Watts does not specifically disclose connecting to a second storage unit and connecting to a first storage unit.

However, Largman discloses:

(e) connecting to a second storage unit; (see Largman paragraph [0021], lines 1-12:
switch between entire sets of data storage devices (first and second storage units))

(j) connecting to said first storage unit; (see Largman paragraph [0021], lines 1-12:
switch between entire sets of data storage devices (first and second storage units))

It would have been obvious to one of ordinary skill in the art to modify Watts-

Heider for connecting to a second storage unit and connecting to a first storage unit as taught by Largman. One of ordinary skill in the art would have been motivated to employ the teachings of Largman in order to more easily create and update templates used in network repairs, perform software installations and "updates" of client computers. (see Largman paragraph [0006], lines 12-17)

With Regards to Claim 48, Watts discloses the method, as recited in claim 47, further comprising switching said computing system from said first operation status to said second operation status. (see Watts paragraph [0028], lines 1-6: switch box (control unit); computer uses connection to control which network is connected to the node) Watts does not specifically disclose verifying an identification of a user executing said request for switching. However, Heider discloses wherein in step (b) further comprises a step of verifying an identification of a user executing said request for switching said computing system. (see Heider col. 14, lines 26-34: authorization and authentication performed (i.e. user identity, ID verification), state switch only allowed if authorization succeeds)

It would have been obvious to one of ordinary skill in the art to modify Watts for verifying an identification of a user executing said request for switching as taught by Heider. One of ordinary skill in the art would have been motivated to employ the teachings of Heider in order to eliminate any need to separately upgrade a number of computer systems when revisions are made in the computer systems themselves or in the procedures used for management, maintenance, and debugging. (see Heider col.

4, lines 7-13)

With Regards to Claim 49, Watts discloses the method, as recited in claim 48. (see Watts paragraph [0028], lines 1-6: switch box (control unit); computer uses connection to control which network is connected to the node) Watts does not disclose masking a switching function during said switching of operation status, so as to minimize a possibility of said operation status being switched illegitimately. However, Heider discloses wherein a step of masking a switching function during said switching of operation status, so as to minimize a possibility of said operation status being switched illegitimately. (see Heider col. 5, lines 53-63; col. 13, lines 48-49: perform switch, from one state to another state; col. 14, lines 15-17: non-maskable interrupt (i.e. NMI) to perform request (i.e. command))

It would have been obvious to one of ordinary skill in the art to modify Watts for masking a switching function during said switching of operation status, so as to minimize a possibility of said operation status being switched illegitimately as taught by Heider. One of ordinary skill in the art would have been motivated to employ the teachings of Heider in order to eliminate any need to separately upgrade a number of computer systems when revisions are made in the computer systems themselves or in the procedures used for management, maintenance, and debugging. (see Heider col. 4, lines 7-13)

With Regards to Claim 50, Watts discloses the method, as recited in claim 49, further

comprises a step of said processing operation status switching is executed by a prearranged control program. (see Watts paragraph [0028], lines 1-6: switch box (control unit); computer uses connection to control which network is connected to the node; paragraph [0046], lines 1-3: implementation using custom integrated circuits or a general purpose processor and software) Watts does not specifically disclose ensuring that said processing operation status switching is executed so as to prohibit illegitimate switching of said operation status. However, Heider discloses wherein a step of ensuring that said processing operation status switching is executed so as to prohibit illegitimate switching of said operation status. (see Heider col. 5, lines 53-63; col. 13, lines 48-49: perform switch, from one state to another state; col. 14, lines 15-17: non-maskable interrupt (i.e. NMI) to perform request (i.e. command))

It would have been obvious to one of ordinary skill in the art to modify Watts for ensuring that said processing operation status switching is executed so as to prohibit illegitimate switching of said operation status as taught by Heider. One of ordinary skill in the art would have been motivated to employ the teachings of Heider in order to eliminate any need to separately upgrade a number of computer systems when revisions are made in the computer systems themselves or in the procedures used for management, maintenance, and debugging. (see Heider col. 4, lines 7-13)

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlton V. Johnson whose telephone number is 571-270-1032. The examiner can normally be reached on Monday thru Friday , 8:00 - 5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser Moazzami can be reached on 571-272-4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nasser G Moazzami/
Supervisory Patent Examiner, Art Unit 2436

Carlton V. Johnson
Examiner
Art Unit 2436

CVJ
December 22, 2008